**Size:** 86,176 acres

Mission: House I Corps Headquarters; plan and execute Pacific, NATO, or other contingency missions;

provide troop training, airfield, medical center, and logistics

HRS Score: 42.78 (Landfill No. 5); placed on NPL in July 1987; deleted from NPL in May 1995

35.48 (Logistics Center); placed on NPL in November 1989

IAG Status: IAG signed in January 1990

**Contaminants:** VOCs, PCBs, heavy metals, waste oils and fuels, coal

liquification wastes, PAHs, solvents, and battery electrolytes

Media Affected: Groundwater and soil

Funding to Date: \$42.1 million

Estimated Cost to Completion (Completion Year): \$46.1 million (FY2029)
Final Remedy in Place or Response Complete Date for All Sites: FY2006



## Fort Lewis, Washington

## **Restoration Background**

Two Fort Lewis sites, Landfill No. 5 and the Logistics Center, were placed on the National Priorities List (NPL) after investigations revealed soil and groundwater contamination. Additional sites include landfills, disposal pits, contaminated buildings, and spill sites. Primary contaminants of concern include organic solvents, heavy metals, and fuels.

Cleanup at Fort Lewis has involved presumptive remedies, such as pump-and-treat, and innovative technologies, such as low-temperature thermal desorption. The Army and regulators signed the Record of Decision (ROD) for the Logistics Center in FY90. The final remedy, a groundwater extraction and treatment system, became operational in FY95. The installation closed a drinking water well at the Logistics Center as an Interim Action in FY91.

In FY92, the Army and regulators signed a ROD specifying No Further Action and long-term monitoring for Landfill No. 5. In FY94, a ROD was signed for Landfill No. 4 and the Solvent Refined Coal Plant. Fort Lewis completed the Remedial Design for contaminated soil at the Solvent Refined Coal Plant in FY95 and awarded the construction contract for the Remedial Action (RA). The installation also completed a pilot-scale study at Landfill No. 4. EPA removed Landfill No. 5 from the NPL in FY95. This was the first federal site, and the first DoD site, to be removed from the NPL.

In FY97, the installation completed the RA at the Solvent Refined Coal Plant and is awaiting site closeout, pending EPA review. It also initiated RA work at Landfill No. 4 using air-sparging and soil vapor extraction (SVE) for contaminated groundwater. Fort Lewis used air strippers for RA operations at the Logistics Center.

To expedite document review, the installation worked closely with EPA and state regulatory agencies. Fort Lewis established an Installation Restoration Program (IRP) Working Group with EPA Region 10, the Washington Department of Ecology, the U.S. Geological Survey, and the U.S. Department of Energy's Pacific Northwest National Laboratory. The objective of the group has been to accelerate site cleanups and to reduce IRP life-cycle costs. Heavy emphasis has been placed on the development of innovative remedial technologies to remediate the Logistics Center NPL site. The Army initiated field testing of one promising technology. In situ redox manipulation (ISRM) is being evaluated for potential full-scale use to remediate trichloroethene (TCE) in the groundwater. Other innovative remedial technologies being planned for field evaluations are phytoremediation and bioremediation.

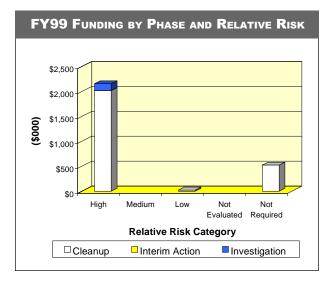
## **FY98 Restoration Progress**

A funding shortfall precluded the execution of fence repair at the polychlorinated biphenyl (PCB)—contaminated site and the explosive ordnance disposal (EOD) range study. The installation determined that Landfill No. 1 requires additional sampling. The installation continued the groundwater RA at Landfill No. 4. It postponed surveying community interest in forming a Restoration Advisory Board (RAB) until FY99 due to limitations on program management funds.

## **Plan of Action**

- Repair the fence at the PCB-contaminated site in FY99
- · Conduct the EOD range study in FY99

- Conduct additional sampling at Landfill No. 1 in FY99
- Poll the local community in spring 1999 to determine interest in forming a RAB
- Complete the Logistics Center NPL site master remediation plan through the Fort Lewis IRP Working Group in FY99
- Conduct site closeout in FY99 at the old fire fighting training pit, stormwater outfalls, the Pesticide Rinse Area, and Vancouver Barracks
- Continue field evaluation of ISRM for treatment of TCE in the Logistics Center's groundwater in FY99
- Initiate phytoremediation field test for Logistics Center groundwater treatment in FY99
- Initiate TCE source investigation at Landfill No. 2 in FY99
- In FY99, continue Landfill No. 4 groundwater RA using airsparging and SVE



Army